# Lesson Preparation book
# ICT
### 4ᵗʰ.Prim – First Term 2023 – 2024
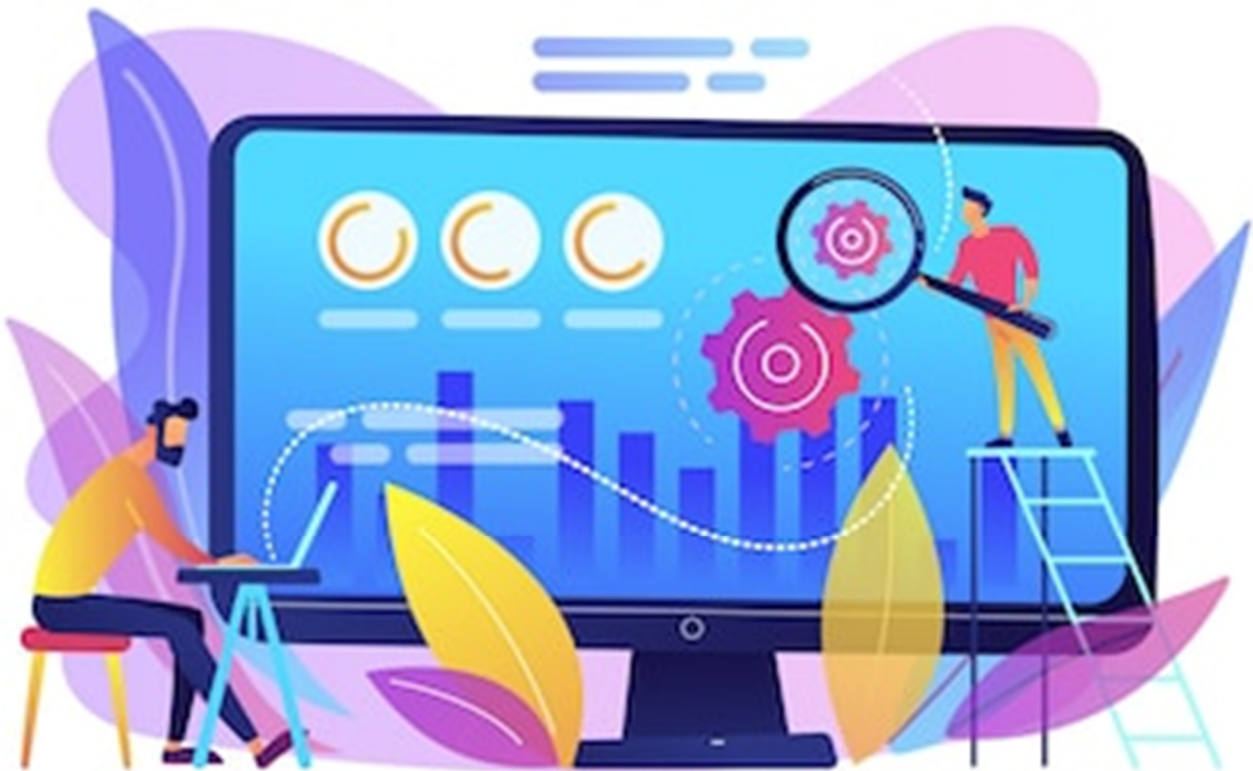
# Teacher's Biography

**Name:** ................................................................................

**School:** ........................................................................

**The educational administration:** ...............................

**Qualification:** ...........................................................

**Teaching Subject:** ...................................................

**Comprehensive School:** ......................................................

**The school to which he is delegated:** ...............................................

**Date of appointment:** ...............................................................

**The job is on the staff:** .............................................................

**Teacher Code:** ...........................................................................

**Mobile Number:** ..........................................................................

| Teacher | Supervisor | School Principal |
|---------|------------|------------------|
| ..................... | ..................... | ..................... |

# Daily Class Schedule

| Period today | First | Second | Third | Fourth | Fifth | Sixth | Seventh | Eighth | Ninth |
|---|---|---|---|---|---|---|---|---|---|
| Saturday | | | | | | | | | |
| Sunday | | | | | | | | | |
| Monday | | | | | | | | | |
| Tuesday | | | | | | | | | |
| Wednesday | | | | | | | | | |
| Thursday | | | | | | | | | |

| Period today | First | Second | Third | Fourth | Fifth | Sixth | Seventh | Eighth | Ninth |
|---|---|---|---|---|---|---|---|---|---|
| Saturday | | | | | | | | | |
| Sunday | | | | | | | | | |
| Monday | | | | | | | | | |
| Tuesday | | | | | | | | | |
| Wednesday | | | | | | | | | |
| Thursday | | | | | | | | | |

**Teacher**
………………………………

**Supervisor**
………………………………

**School Principal**
………………………………

# The specific objectives of computer and information technology

- **Providing** students with the appropriate amount of scientific and basic knowledge and skills related to how to solve problems

- **Develop** basic scientific thinking skills

- **Gaining** the ability to use technical means , multimedia, and networks, and employing them as tools to serve and integrate with different fields of study

- **Training** students to work in a team by practicing computer techniques

- **create** Websites and define their properties

- **Developing** students' awareness of the importance of technological awareness and cultural communication

- **Acquisition of** concepts of the principles of designing web pages

- **appreciation** of the role played by science and scientists

- **recognize** On the suite of Microsoft Office programs

- **Raising** students' awareness of the concept of information ethics and the rules of safe use of the Internet

- **It collects** data and presents it in an interesting way

| Teacher | Supervisor | School Principal |
| --- | --- | --- |
| …………………………… | ………………………… | ……………………… |

# The specific objectives of computer and information technology

- **Identify** some technology used to explore the earth.
- **Explain** the different terms for technology.
- **Discuss** the history of ICT.
- **Discuss** How to use Technology in our daily life.
- **Explain** the main components of a computer system.
- **Explain** the basic functions of operating systems and software
- **Realize** the importance of the operating system of a computer
- **Explain** the definition of assistive technology
- **Discusse** how technology is improving the lives of people of determination
- **Suggest** a technology that can contribute to improving the lives of others
- **Discusse** the problems he has experienced at school or at home.
- **Suggest** solutions to common ICT problems .
- **Explain** why technological solutions must match people's lives
- **Describe** online risks and dangers.
- **Explain the** importance of keeping  personal information privacy.
- **Discuss** the method of choosing words key to be used in the research Online
- **Realize** the importance of search engines for children
- **Define** the characteristics of sources  reliable online sources .
- **Describ** reliable sources of information and unreliable online .
- **Explain** the purpose of Egyptian knowledge bank.
- **Describe** the role of control management Internet crimes
- **Realize** importance of creating strong password.
- **Discusse** The importance of good anti-viruses software .
- **Identify** an important topic to raise awareness.

| Teacher | Supervisor | School Principal |
|---------|------------|------------------|
| ……………………… | ……………………… | ……………………… |

# Distribution of the content of computer, Information Technology and communication

## For the 4th primary grade – First term for year 2023–2024

**The first axis:** (The role of information and communication technology in our lives)

| | | |
|---|---|---|
| 1 | Lesson 1 | Active Explorer |
| | Lesson 2 | The evolution of technology |
| 2 | Lesson 3 | Components of computer systems |
| | Lesson 4 | Software and Operating Systems |
| 3 | Lesson 5 | Supporting people of determination |
| | Lesson 6 | Common Problems and Solutions |
| 4 | Lesson 7 | collecting, analyzing, and graphing data |
| | Lesson 8 | Reporting findings |
| 5 | | **General review on the first axis** |

**The second axis:** (Digital safety and security precautions )

| | | |
|---|---|---|
| 6 | Lesson 1 | Active Explorer |
| | Lesson 2 | Online dangers and how to be safe |
| 7 | Lesson 3 | Using ICT tools in a healthy and ethical way |
| | Lesson 4 | How to search online |
| 8 | Lesson 5 | How to check whether information online is true |
| | Lesson 6 | Who can help you with online problems |
| 9 | Lesson 7 | My personal digital safety plan |
| | Lesson 8 | Practicing what you learned |
| 10 | | **General review on the second axis** |

| Teacher | Supervisor | School Principal |
|---|---|---|
| ……………………… | ……………………… | ……………………… |

**First Axis**
**(The role of ICT in our lives)**
**Lesson 1: The Active Explorer Albert Lin**

**Lesson objectives:**

By the end of this lesson the student will be able to:

- **Identify** some ICT tools used to explore the earth.

- **Explain** the different terms for technology.

- **Describe** how technology can be used to search for things under the ground

**Strategy:** Brainstorming – dialogue and discussion – cooperative learning

**Teaching aids:** Electronic board – Student's book – introductory video by Albert Lin

**Warm Up :** What are the different types of technology that can be used in Earth exploration?

## Lesson Presentation

→**Albert Lin** is an archaeologist who used technological tools to explore archaeological sites( **without digging** ).

→**The importance of technological tools for archaeologists is as follows :–**

**1 It allows them** to explore in a simple and easy ways and saves effort and cost

**2– It helps them** to identify where they should dig, by conducting a survey above and below the ground.

→ **There are many ICT tools that Albert Lin can use to explore the Earth:**

**Underground**          **above ground**

| **Magnetometer** | **Ground penetrating radar (GPR)** | **Satellites** | **Drones** | **Global Positioning System (GPS)** |
|---|---|---|---|---|
| It is used to find **metal in the ground** and also to measure the magnetic field | It is used to find **objects buried** below the surface of the earth | Used to **take pictures from the space** To get more details and information about an area | It is used to **detect an area** by controlling the pilot while it is on the ground **to take pictures** | **To search for a site** for a purpose |

You don't have to be a scientist or archaeologist or even an adult to be able to use technology

**Evaluation :**   **Put √ or X:–**

GPS is used to find the places you want to visit     (    )

**Homework:**   Solve The book's Exercise P.12 – 13

| Date | | | | | | |
|------|--|--|--|--|--|--|
| Class | | | | | | |
| Session | | | | | | |

**First Axis**
**(The role of ICT in our lives)**
**Lesson 2: The evolution of technology**

**Lesson objectives:**

By the end of this lesson the student will be able to:
- **Discuss** the history of ICT .
- **Discuss** How to use Technology in our daily life.
- **Improve** his typing speed.

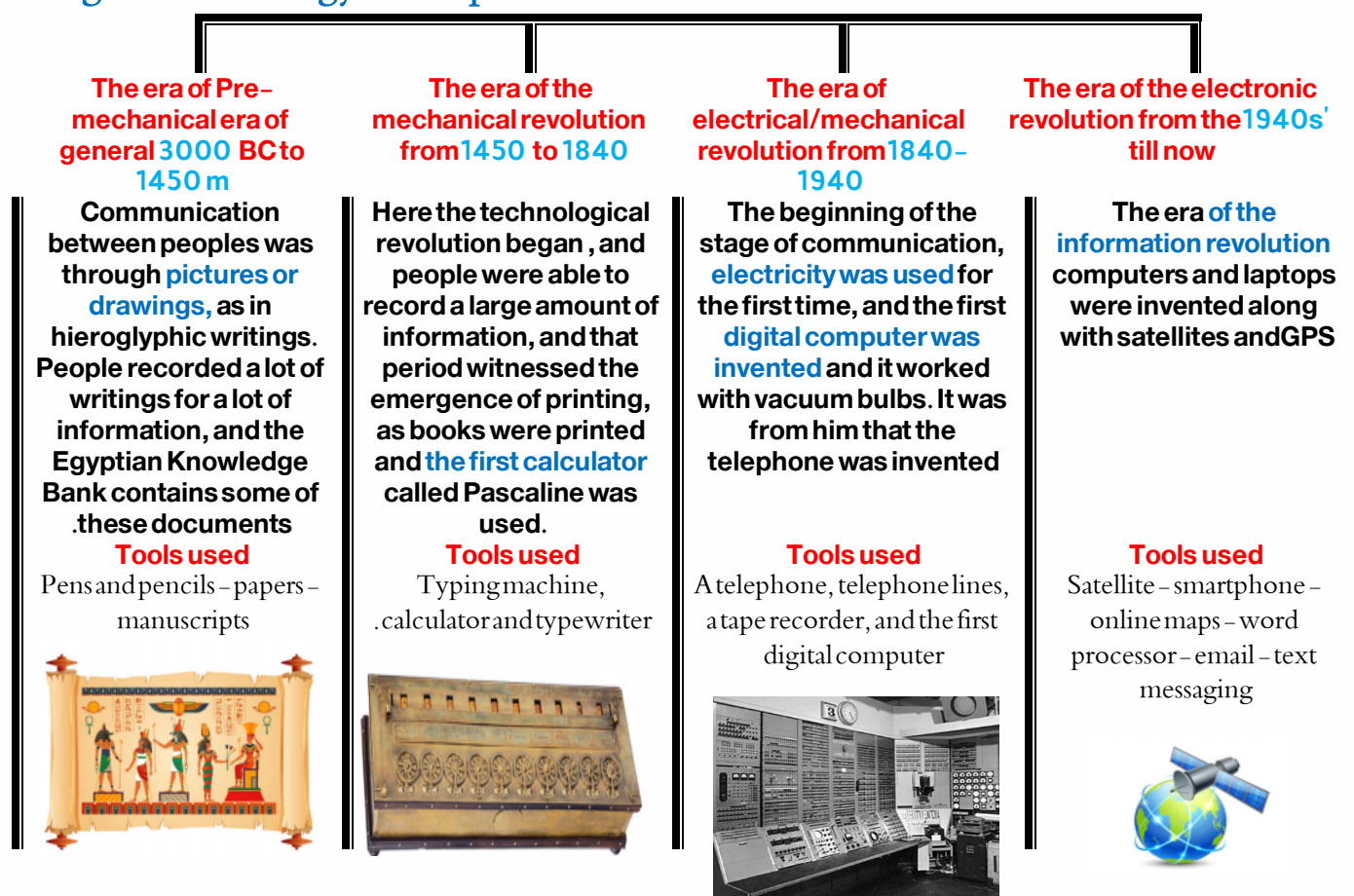**Strategy:** Dialogue and discussion – practical training

**Teaching aids:** – Electronic whiteboard Student's Book presentation – – Word program – video

**Warm Up :** **How can you record information ?**

**Lesson Presentation**

🖥 Stages of technology development over time :

| The era of Pre-mechanical era of general 3000 BC to 1450 m | The era of the mechanical revolution from 1450 to 1840 | The era of electrical/mechanical revolution from 1840–1940 | The era of the electronic revolution from the 1940s' till now |
|---|---|---|---|
| **Communication between peoples was through pictures or drawings, as in hieroglyphic writings. People recorded a lot of writings for a lot of information, and the Egyptian Knowledge Bank contains some of these documents.** | **Here the technological revolution began , and people were able to record a large amount of information, and that period witnessed the emergence of printing, as books were printed and the first calculator called Pascaline was used.** | **The beginning of the stage of communication, electricity was used for the first time, and the first digital computer was invented and it worked with vacuum bulbs. It was from him that the telephone was invented** | **The era of the information revolution computers and laptops were invented along with satellites and GPS** |
| **Tools used** | **Tools used** | **Tools used** | **Tools used** |
| Pens and pencils – papers – manuscripts | Typing machine, calculator and typewriter. | A telephone, telephone lines, a tape recorder, and the first digital computer | Satellite – smartphone – online maps – word processor – email – text messaging |

**Evaluation :** **Complete: Pascaline's machine is the first version of ...........................**

**Homework :** **Solve The book's Questions P.16 – 17**

**First Axis**
**(The role of ICT in our lives)**
**Lesson 3: Components of computer systems**

**Lesson objectives:**

By the end of this lesson the student will be able to:

- **Explain** the main components of a computer system.

- **Identify** the concept of input, output, and data

**Strategy:**  - **Describe** different types of computer hardware.

**Teaching aids:**  Peer learning – Dialogue and discussion – Critical thinking

**Warm Up :**  – Electronic boardStudent's Bookpresentation – cards for computer components –

---

**Lesson Presentation**

---

**Computer :** It is an electronic device whose function is to process data and has the ability to store, retrieve and process data and information such as modifying and creating tables, presentations, video clips, and so on.

**From the uses of the computer:–**

 1– Writing documents  2– Sending Email  3– Gaming  4– Surfing the Internet

 5– Editing and creating spreadsheets, presentations, and videos

**Shapes of computers:–**

1– personal computer  ٢– a laptop  ٣– A tablet  ٤– Touch screen devices

→The shape of the computer and its components vary according to its type, date of manufacture, and device model.

**Basic components of a computer**

→Computer components are divided into :

| input units | | | output units | | |
|---|---|---|---|---|---|
| Keyboard | Mouse | Microphone | displayScreen | Brailleterminal | Speaker |
| Camera | Scanner | Touchscreen | Printer machine | Speechsynthesizer | |

📖 **The main component of using a computer is you !** Computers are only as effective as the data we put into them. Some users may connect the devices in the wrong way or misuse them, which can cause malfunction. **Therefore** , always be careful when you connect the devices to the computer

📖 **How the computer works :–**

Users enter data into the computer with input units and the machine in turn gives us the information with one of the output units

**Evaluation:**  **Complete:** Of the devices that a word processing needs to write on a computer.............

**Homework :**  **Solve The book's Questions P.20 – 21**

**First Axis**
**(The role of ICT in our lives)**
**Lesson 4: Software and Operating Systems**

**Lesson objectives:**

By the end of this lesson the student will be able to:
- **Explain** the basic functions of operating systems and software
- **Differentiate** between hardware and software
- **Realize** the importance of the operating system of a computer

**Strategy:**
**Teaching aids:**

Brainstorming – dialogue and discussion – Practical training – Electronic board Student's Book video – – presentation

**Warm Up :**

How does the computer communicate with you and carry out your orders?

## Lesson Presentation

→ we do many things with our devices, we play games, write notes and go on the internet. **But how does this all happen?**

→ Computer components are divided into:

1– **Hardware:** It is the touched parts that make up a computer and it is divided into input units, output units, and the central processing unit.

📖 **The Central Processing Unit )CPU(** is responsible for processing and controlling data and converting it into information that it sends back to the operating system.

📖 When processing data in the event that the program solve any problem before it gives the system Run commands the processing unit to save what you typed up to this point At the moment, your work may get erased and you have to redo it so it is important to remember to save your work regularly

2– **Software:** – It helps the user to do the tasks he needs

→ **Software includes**

a) **Operating System:** Responsible for running the computer and helping the user to run various programs, such as Windows.

b) **Programs and applications:** such as presentations – word processor – Google Chrome browser – gaming applications

→ **Illustration of how data is processed in Microsoft Word :**
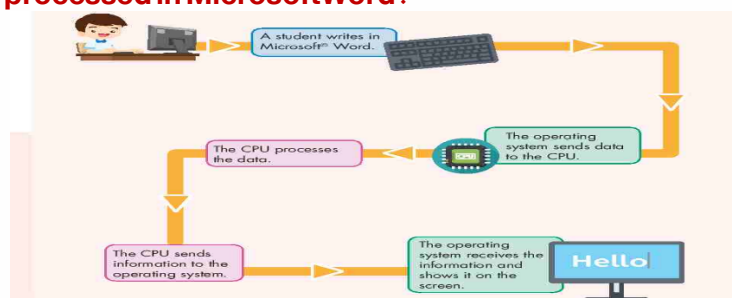


**Evaluation:**

**Put √ or X :–**

Operating system is not required for computers ( )

**Homework :**

Solve The book's Questions P.24 – 25

**First Term - Prepared and Designed by / Yasmin Shoaeb – جروب فريق أصدقاء الكمبيوتر المتخصص**

| Date | | | | | | | |
|------|--|--|--|--|--|--|--|
| **Class** | | | | | | | |
| **Session** | | | | | | | |

**First Axis**
**(The role of ICT in our lives)**
Lesson 5: Supporting people of determination

**Lesson objectives:**
By the end of this lesson the student will be able to:
- **Explain** the definition of assistive technology
- **Discusse** how technology is improving the lives of people of determination
- **Suggest** a technology that can contribute to improving the lives of others

**Strategy:** Critical thinking – Active learning

**Teaching aids:** – Electronic whiteboardStudent's Bookvideo – presentation –

**Warm Up :** How can technology help people with determination?

## Lesson Presentation

▪ **Assistive Technology:–**
Devices and applications that assist people of determination in the businesses they find Difficulty carrying out in their daily lives.

▪ **Albert Lin:**
He has a limb difference but he didn't let that stand in the way of his success , he still does all the things , he used to do in .The former, including exploring multiple places around the world And had it not been for the prosthetic leg that he got thanks to assistive technology " for what was able to do so "

▪ **Stephen Hawking:**
physicist who used the robotic chair . to move, and was equipped with a system that enables him to speak

▪ **Examples of assistive technology**

✵ **Hearing aids**
Helping people with problems .hearing Includes applications through which headphones can be connected with smart phones

✵ **screen enlargement software**
They are programs that enlarge everything on a screen . computer Allow people with poor eyesight Interact with a computer

✵ **Alternative communication software**
Helping people of determination to communicate verbally . linguistic with others

✵ **Sports equipment**
Certain sports equipment is allowed for people with disabilities And amateurs who have lost a limb to climb mountains

📖 Sports equipment helps people of determination to carry out normal and exceptional activities, such assoccer
balls The squeaky ... tricycles Wheels and hand operated ... Prosthetics and devices Prosthetic ... wheelchairs

**Evaluation:** **Put √ or X:–**
Assistive technology is a technology that helps people of determination go about their daily lives(    )

**Homework :** Solve The book's Questions P.20 – 21

**First Term - Prepared and Designed by / Yasmin Shoaeb** – يق أصدقاء الكمبيوتر المتخصص

| Date | |
|------|---|
| Class | |
| Session | |

**First Axis**
**(The role of ICT in our lives)**
Lesson 6: Common Problems and Solutions

**Lesson objectives:**

By the end of this lesson the student will be able to:
- **Discusse** the problems he has experienced at school or at home.
- **Discusse** how people experience problems with technology.
- **Suggest** solutions to common ICT problems .

**Strategy:** Problem solving – dialogue and discussion – cooperative learning

**Teaching aids:** Electronic board – Student's Book – Presentation

**Warm Up :** What ICT problems have you experienced at school or at home?

**Lesson Presentation**

✡: Technology tools, such as a PC, laptop, or tablet, help you

→Do the tasks that assigned to you by your teacher          →Search for information on the internet

→Writing reports and assignments using word processing software          →Use it in games

📖However, sometimes a malfunction or temporary malfunction may occur in these devices that prevents you from operating them.

✪ Some technological problems while using a computer and how to solve them:

| Problem | Solution |
|---------|----------|
| 1. App won't open | 1. Restart computer and try again<br>2. Check software updates.<br>3. Uninstall and reinstall the app.<br>4. Ask your teacher or family for help. |
| 2. The mouse cursor isn't working | 1. Make sure you connect the mouse cable to correct place in the motherboard and restart your device.<br>2. Replace the mouse<br>3. Ask your teacher or family for help. |
| 3. You can't find a file | 1. Check Downloads folder.<br>If you looking for word file, look in Documents folder.<br>If you looking for photo, look in Pictures folder.<br>2. Use Search box next to start button.<br>3. Ask your teacher or family for help. |
| 4. Your screen freezes | 1. Press and hold "Ctrl + Alt + Del" buttons together.<br>2. Try to power off computer and restart.<br>3. Ask your teacher or family for help. |
| 5. The keyboard isn't typing | 1. Make sure you connect the keyboard cable to correct place in the motherboard and restart your device.<br>2. Replace the keyboard<br>3. Ask your teacher or family for help. |

**Evaluation:** **Complete:** The command responsible for closing the PC or mobile applications is...............................

**Homework :** Solve The book's Questions P.32 – 33

**First Term - Prepared and Designed by / Yasmin Shoaeb** – جروب – ريى أصدقاء الكمبيوتر المتخصص

4th Grade

**First Axis**
**( The role of ICT in our lives )**
Lesson 7: Common Problems and Solutions

**Lesson objectives:**

By the end of this lesson the student will be able to:

- **D efine** the digital tools can be Use to organize that data .

- **Present** information about an students **issue** by collecting, analyzing, and graphics graphing data..

- **Discusse** with his classmates Common problems for students

**Strategy:**
Cooperative learning – dialogue and discussion – Practical Training

**Teaching aids:**
– Electronic boardStudent's BookPresentation – boards and pens

**Warm Up :**
**How can digital tools help you organize information ?**

**Lesson Presentation**

❑ **In order for scientists and archaeologists to be able to study phenomena or solve problems, they had to follow the following steps:**

→related data collection with it     → data analysis     →data expression and represent it in graphics

1– **Data collection:**

→It is important to ensure that the information you collect is correct and accurate. Always use reliable sources.

→ Data can be collected from various sources, and the most common sources are :

❑Books and articles ) **digital or printed** )     ❑ Records     ❑Surveys "**digital and paper**"     ❑experiments

2– **Data analysis:**

**In this step, you must:**

✳ Review the data you collected, analyze it and explain its meaning .

✳ Extract recurring patterns from them to be able to analyze them .

✳ Interpret data to understand its meaning .

✳ Data can be used to find out what happened in the past and whyWhat might happen in the future, and what should be done.

3– **data expression:**

✳ When you have finished analyzing the information reached, you are ready to express it in a graph .

✳ A graph is used to display and compare different categories of information the most common is . Clearly the **column** graph.

✳ Graphs can be drawn on paper or using spreadsheet software **Excel** .

**Example: –** Nesma asked14 of her classmates about their favorite devices.

**And this is the information I analyzed: Note that the method of data collection here is interviews**

√ Seven of her classmates answered that their favorite device is a smartphone .

√ Five of her classmates answered that their favorite device is a laptop.

√ Two of her classmates answered that their favorite device is a tablet.

√After Nesma analyzed the information, she expressed it on a graph
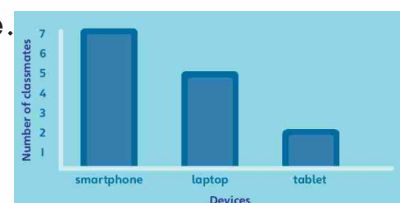
**Evaluation:**
**Complete:** The most common graph is..................

**Homework :**
**Solve The book's Questions P.36 – 37**

**First Axis**
**(The role of ICT in our lives)**
Lesson 8: Preparing reports for research findings

**Lesson objectives:**

By the end of this lesson the student will be able to:
- Discusse different ways of communicate electronically .
-  Explains how to usedifferent types of technology to communicate with others.
- C ommunicates electronically with colleagues e and teachers .

**Strategy:** Dialogue and discussion – Practical training – critical thinking

**Teaching aids:** Electronic board – Student's Book – Presentation panels

**Warm Up :** Why is it important to be able to communicate electronically with others?

## Lesson Presentation

❑ **Researchers report the information obtained in several different ways:**

✳ Digital Articles published    ✳ blogging digital    ✳ Social media sites    ✳ Interviews
✳ TV programs    ✳ video chats    ✳ Text messages    ✳ email

❀ **Digital blogs:**
Opinions express the owner, published on the Internet.

❀ **Published digital articles:**
personal information and opinions expressing their author, available for reading And download on various sites.

❀ **Social networking sites:**
one of the unreliable sources of information, and it allows you to display And share the information with your friends or people you know.

❀ **Interviews:**
a conversation between two or more persons for the purpose of obtaining information.

❀ **TV shows Recorded or direct**
interviews or programs that allow information to be shared with viewers via television.

❀ **Email: Email**
is the most common way to share data.
Communication takes place by exchanging messages between individuals electronically.
You can write reports and attach files.

❀ **Video chats:**
used to communicate over distant places with your friends and colleagues With sound and image, and we use the camera and microphone.
It can be used to share information with specific people.
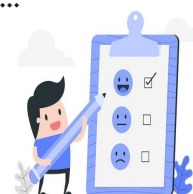
❀ **Text messages:**
Friends can use it as a way to communicate between them, and it is one of the Appropriate solutions to deliver quick information
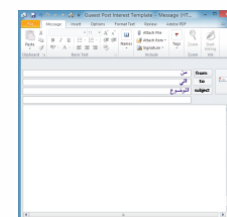
**Evaluation:** **Complete:** Express their owners published on the Internet.....................

**Homework :** Solve The book's Questions P.40 – 41

**First Term - Prepared and Designed by/ Yasmin Shoaeb** ق أصدقاء الكمبيوتر المتخصص

## General Review on First Axis
### (The role of ICT in our lives)

**Lesson objectives:** By the end of this lesson the student will be able to:

- **Identifie** some of the technology tools used in earth exploration
  **Explain how** to use different tools technology to communicate with others

- **Practicing** some skills in dealing with computer and internet problems

**Strategy:** Brainstorming – dialogue and discussion – cooperative learning

**Teaching aids:** Electronic board – Student's Book

**Warm Up :** After what you learned in the first axis…. How can we use information and communication technology effectively?

### Lesson Presentation

**Write a sentence :** Write a sentence for each of the following pairs of phrases to explain the connection between them:

❑ keyboard and display .

❑ Operating system and CPU .

❑ Poll and chart

**Read and answer:**

❑ Name two tools that archaeologists use to explore the Earth.

❑ In what era was electricity used for the first time

❑ List three peripherals that you use during a video chat.

❑ What is assistive technology? Give an example of it .

❑ What is software? Mention an example of it.

❑ Identify one of the most common problems in information and communication technology and ways to solve it.

❑ What is the best way to analyze a large amount of data?

❑ List three ways in which researchers report on the information they collect.

**Evaluation:** Evaluate the students' answers

**Homework :** Solve The book's Questions P.42 – 43

# Second Axis

## Digital safety and security precautions

**Second Axis**
**( Digital safety and security precautions )**
**Lesson 1: Active Explorer ( Anika Olah )**

**Lesson objectives:**

**By the end of this lesson the student will be able to:**
- **talk** about the importance of the Internet.
- **Describe** how technology is **used** To communicate with others
- **Explain** why technological solutions must match people's lives

**Strategy:** Brainstorming – dialogue and discussion – critical thinking

**Teaching aids:** The electronic board – the textbook – the presentation – an introductory video of Eneqa Olah

**Warm Up :** How can the Internet help you discover more information?

## Lesson Presentation

**The Internet** is an effective tool for communicating with others Through which all kinds of information can be accessed. However, it is necessary to make sure that the information you have obtained is correct.

❑**Anika Olah:** A biologist, while she was at a wedding, tasted a candy made from a type of nut. She was curious and wanted to know more about this type of nut. For cancer, I tried to help the community by speaking to the local people, and I prepared awareness campaigns to help people lead a healthier lifestyle.

❑ **Steps to conduct a web search:**

1. **Select** the information you want to obtain
2. **Think** about the search terms or keywords you will use
3. **Verify** the data by trying to find it in more than one source
4. **Review** the information provided I got it pretty well
5. **Be sure** to write down this data

**Note: You can find data by talking to people directly or by searching online**

**Evaluation:** **Complete:** When conducting a search on the Internet, you should

**Homework :** Solve The book's Questions P.47 – 48

**Second Axis**
**( Digital safety and securityprecautions )**
Lesson 2: Online dangers and how to be safe

**Lesson objectives:** **By the end of this lesson the student will be able to:**
- **Describe** online risks and dangers.
- **Explain the** importance of keeping personal information privacy.
- **D iscusse** ways to be safe while online.

**Strategy:** Brainstorming – dialogue and discussion
**Teaching aids:** Electronic board – textbook – presentation
**Warm Up :** What do you already do to stay safe online?

## Lesson Presentation

There are many ways to communicate via the Internet, such as using computers, phones, and tablets.

You can communicate with your colleagues, through : instant text messages, e-mails, direct messages, – and chatting through discussion forums.

You should pay attention: There are some people who communicate via the Internet for bad purposes , or – with the aim of stealing your personal information, and make sure you know the identity of the person you are talking to online.

If you come into contact with an unkind person online, you can block them from contacting you.

If you block Block someone, you won't be able to do this the person who communicates with you or see your account

Be careful and do not click on links whose content you do not know.

Sharing data and information on the Internet:

Do not share your personal information online without the consent of your teacher or family.

If you share your personal data on the Internet, you may receive spam and unsolicited messages

Spam messages: They are unwanted messages to advertise a product or obtain information from you and may contain viruses or unknown hyperlinks.
Note : Spam may include a title , unknown electronic links , or texts written in capital letters.

Download files: You can save and download the files you want while you are using the Internet; To be able – to open it at a later time without need to connect to the Internet.

Think carefully before you download any file. Some of them contain viruses that may harm your device or track your information; So check the site you are downloading the files from.

**Evaluation:** **Complete:** Your friend sent a friend request on a social networking site, you must..........

**Homework :** Solve The book's Questions P.52 – 53

**First Term - Prepared and Designed by / Yasmin Shoaeb – جروب فريق أصدقاء الكمبيوتر المتخصص**

**Second Axis**
**( Digital safety and security precautions )**
**Lesson 3 : Using ICT tools in a healthy and ethical way**

**Lesson objectives :**

**By the end of this lesson the student will be able to :**
- **Discusse** communicating positive messages online .
- **Explain** what it means to use ICT tools ethically.
- **Explain** the positive and negative effects of ICT tools .

**Strategy :** Cooperative learning – Dialogue and discussion – Peer learning

**Teaching aids :** Electronic whiteboard – textbook – presentation – video

**Warm Up :** What important message would you like to share online?

## Lesson Presentation

❀ **Posting information on the Internet :**

When you want to publish information about your friends on social networking sites and mention them in Make sure to ask their permission first, as this will show that you respect their privacy your posts .

❀ **Tag :** is the identification of a person in )post or photo .or a video clip )

This hashtag or mention includes a link to that person's profile ; So you have to make sure that the person you are referring to does not object to it

❀ **Before publishing any post, ask yourself the following question :**

1– Is the content of this publication good?

2– Does it harm anyone?

If you are not sure about it, do not post it

❀ **Crediting Others :** When you are looking for information to publish on the Internet or for inclusion in a Power Point Presentation It is important that Document the source of the information you share and mention the owners. By mentioning the source of the information, you are telling others that this information is Ownership of the owner of the source )individual or company( and its preference belongs to him

▪ **Respecting the law :**

Whether you are publishing information on the Internet or researching topics, make sure to respect the law. Do not go to prohibited sites that publish inaccurate or harmful topics.

| Positive effects of using ICT | Negative effects of using ICT |
|---|---|
| – View the news with one click of the mouse | – Maybe you see something on the Internet that annoys you |
| – download videos and photos, to your device, and watch them whenever you want | – You may feel tired in your eyes or a headache as a result of using electronic devices |
| – Communicate with your friends and family members wherever they are anywhere in the world | – Some people rely on Google to find answers to all their questions |

**Evaluation :** **Complete :** One of ICT tools's Advantages ....................

**Homework :** **Solve The book's Questions P.56 – 57**

**Second Axis**
**( Digital safety and security precautions )**
**Lesson 4 : How to search online**

**Lesson objectives :** **By the end of this lesson the student will be able to :**

- **Explain** how to use browsers to search safely and correctly.
- **Discuss** the method of choosing words key to be used in the research Online
- **Realize** the importance of search engines for children

**Strategy :** Practical training – dialogue and discussion – critical thinking

**Teaching aids :** Electronic board – textbook – presentation

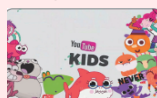**Warm Up :** **Do you always find the information you need when you search?**

## Lesson Presentation

❑ **To search securely :**

✴ **If you receive a warning message** Show it to a family member or teacher, and don't follow through Entering the site or the download process.
Browse websites dedicated to your age only, seek help with your teacher or with your family.

✴ **When conducting a search,** be sure to take advantage of Security properties for browsers , by selecting when Try to enter a site insecure, or download malicious software.

✴ **If the sites Not safe** Watching videos is not fun dangerous; For displaying unsafe, dangerous or otherwise unsafe videos . appropriate for your age
✴ **You can use** browser tools to avoid it Clicking on links to inappropriate videos

✴ **Some browsers feature** custom search engines For children, content suitable for their age groups is presented.
It may include an app that allows parents to monitor children their children, along with helpful child safety tips.

❑ **Smart search :**

✴ **If the keywords you use are general and popular** Very, you will get You will get a large number of results, and many of them will not be relevant to your search

✴ **Write long sentences ,** instead of Just two or three words

✴ **Search engines ignore some words, such as :** (the – and – how – where – or )You may need these words or letters in your search In order to ensure that your search includes these words or Letters Add the symbol ( + ) before the word

✴ **If you are looking for information about a particular photo** You can use the picture instead of the words in the text your search process.
Use the camera button, and add the photo you want

✴ **To shorten, limit, reduce and narrow the results that you get** From the search, put this sentence in my tags quotes " "

✴ **To ensure that your search does not include other results** desirable or unnecessary, you can add The symbol( – ) before the words you want Not included in the research

❑ **Browser :** An application used to access information on the Internet, such as. **Fire fox – Google Chrome – Opera**

❑ **Search Engine :** **search engine** It is an application or program that is used to search the Internet, such as . **Yahoo – Google – Bing :**

❑ **Results :** **Results** It is a list of results that are collected and displayed based on a specific search .

**Evaluation :** **Put √ or X :-**
The Internet is not important in obtaining information

**Homework :** **Solve The book's Questions P.60 – 62**

**4th Grade**

**Second Axis**
**( Digital safety and security precautions )**
Lesson 5 : How to check whether information online is true

**Lesson objectives :**

**By the end of this lesson the student will be able to :**
- **Define** the characteristics of sources reliable online sources .
- **Describ** reliable sources of information and unreliable online .
- **Explain** the purpose of Egyptian knowledge bank.

**Strategy :** Brainstorming – dialogue and discussion – active learning – role playing
**Teaching aids :** Electronic whiteboard – textbook – presentation – video
**Warm Up :** How do you know whether the information you find online is true?

> **Lesson Presentation**

❑ **The electronic sources** that give you the information you are looking for are countless and valuable , and this information may be **credible** or include personal opinions, wrong ideas, lies, lacking credibility Blogs and open source websites such as "wiki" are unreliable **sources** Verify reliable sources

❑ **When reviewing online resources, be sure to :**

The publication date is recent

Check the identity of the authors, who are they? Do they have experience

Reliable sources feature well–written, error–free texts

Make sure that the design of the pages is at a high level of professionalism

Websites whose links end in . **com** . It may be reliable, but it is run by product marketing companies

Linked sites . **gov** .. **org** .. **edu** . It has a **high degree of credibility**

**Website domains and groups you manage**

| **.com** | **.edu.eg** | **.org.eg** | **.gov.eg** |
|----------|-------------|-------------|-------------|
| Commercial sites | Educational sites | Non–Governmental Organizations | Government websites |

**Egyptian Knowledge BankEKB :**
A digital library that the Egyptian government made freely accessible in ٢٠١٦ to Unreliable protect its sources citizens from

This library contains materials on various topics, the accuracy of all information contained in it has been checked, and it is credible

**Evaluation :**

Put √ or X :–
All information on the internet is completely correct  (  )

**Homework :** Solve The book's Questions P.64 – 65

Egyptian Knowledge Bank
بنك المعرفة المصري

**Second Axis**
**( Digital safety and securityprecautions )**
**Lesson 6: Who can help you with online problems**

**Lesson objectives:** **By the end of this lesson the student will be able to:**
- **Explain** common online problems.
- **Determine** who can help him with online problems.
- **Describe** the role of control management Internet crimes

**Strategy:** **Brainstorming – dialogue and discussion**
**Teaching aids:** **Electronic board – textbook – presentation**
**Warm Up :** **If someone unkind you online who would you tell?**

**Lesson Presentation**

📖**Internet bullying and how to stop it**

→**Bullying:** When one person behaves badly towards another person, repeatedly
Bullying can include:

texts       messages       posts

- A bully can share these posts, messages, or texts with you alone or with others, and it is difficult to escape from this type of bullying

- Always be careful not to communicate with unknown people For you, and to inform your guardian of any situation that you may be exposed to so that he can help you

→Identity theft on the Internet

It is possible for a person to steal your identity or the identity of a member of your family via the Internet , and at that time the thief can use your personal information and can access your accounts on social networking sites, your home address, e-mail, or phone number

→What can we do to face problems while using the Internet ?

- You don't have to deal with problems or face problems alone, make sure to tell an adult you trust about it, this person may be your father, mother or teacher

- Sometimes it may be necessary for the intervention of the competent authorities the Anti-Cyber Crime Department to track this problem

Remember: the problems you encounter online are common problems that may scare you or make you feel powerless to deal with them, but you can always ask your family or the police for help.

**Evaluation:** **Complete:** A person impersonating you on social networking sites is................

**Homework :** **Solve The book's Questions P.68 – 69**

**4th Grade**

**Second Axis**
**( Digital safety and security precautions )**
**Lesson 7: Who can help you with online problems**

**Lesson objectives:**

**By the end of this lesson the student will be able to:**
- **Realize** importance of creating strong password.
- **Discusse** The importance of good anti-viruses software .
- **Explain** Ways to protect devices from Potential dangers online.

**Strategy:** Dialogue and discussion – critical thinking – cooperative learning
**Teaching aids:** Electronic board – textbook – presentation
**Warm Up :** **Why is it important to have a strong password?**

## Lesson Presentation

❑ **Create strong passwords :**
▪ It is important to have strong passwords, if they are easy to predict, some people **hackers** , **computer hackers** may be able to access your computer or the Internet, and this is what is known as **piracy** or **hacking**
▪ **Do not use one password** to access all your accounts, if someone knows your password, He will be able to access all of your accounts
▪ It is difficult to remember many passwords, so use **a password management system** or prepare a list of these words and keep them in a safe place

❑ **Consider the following to create a strong password :**

| **To include letters and numbers** | **The password should consist of eight characters** | **The password does not include your name or any personal information** |

❑ **Viruses:** Dangerous programs that lead to serious problems if they infect the computer Sending emails without your knowledge to the addresses of everyone on your device ,Delete your files

❑ **Antivirus programs :** They are programs that protect your devices from infection with viruses . When choosing antivirus programs, it is preferable to choose an easy-to-use program

❑ **Be careful when using the Internet and that is through :**
Choose different passwords for your accounts on social networking sites, your email and your digital devices.
Use antivirus software on these devices.
There are sites that provide some insurance services for your accounts.

**Evaluation:** **Complete:** It's working ............................... to destroy your personal device.

**Homework :** **Solve The book's Questions P.72 – 73**

| Date | | | | | | | |
|------|--|--|--|--|--|--|--|
| Class | | | | | | | |
| Session | | | | | | | |
| | | | | | | | |

**Second Axis**
**( Digital safety and securityprecautions )**
Lesson 8: Practicing what you learned

**Lesson objectives:** **By the end of this lesson the student will be able to:**
   - **Discusse** topics that he would like to research on with his colleagues
   - **Identify** an important topic to raise awareness.
   - **Choose a** suitable presentation tool.

**Strategy:** Brainstorming – dialogue and discussion – practical training – cooperative learning

**Teaching aids:** Electronic board – textbook – PowerPoint

**Warm Up :** What topic would you like to research?

## Lesson Presentation

**Researchers or explorers prepare digital reports on the subject of their study using:**

| | | |
|--|--|--|
| **Advertising posters** | **video clips** | **Presentations with powerpoint** |

**1– Power point program**

A program produced by Microsoft, whose task is to prepare presentations through presentation slides

It is a great way to present your ideas to others, as you can make your texts great using word art .
Add text and images to your presentation fun......... sound effects to it

**2– Video clips**

You can prepare your own video as a display for the research you have conducted, and you do not need expensive machines to prepare it. You only need a computer or mobile phone to record video and audio videos

You can also interview others and add them to your video
There are many mobile phone applications that can help you prepare videos

**advertising –posters**

You can use posters as a way to present your ideas
It is an entertaining and effective way to present ideas, as you can display information through pictures and graphics
Make sure to write in bold so that others can read the information from afar, and present your ideas clearly
Do not forget to mention the source of your information

**Evaluation:** Complete: It is one of the most reliable sources on the Interne
....................

**Homework :** Solve The book's Questions P.76 – 77

**First Term - Prepared and Designed by / Yasmin Shoaeb** – جروب فريق أصدقاء الكمبيوتر المتخصص

**General Review on Second Axis**
**( Digital safety and securityprecautions )**

**Lesson objectives:**

**By the end of this lesson the student will be able to:**

- **Mention** the different types of sources that can be used for Internet research

- **knows** a role Search engines and advanced search tools in online search

- **Acquiring** the skill of solving some technological problems

**Strategy:**  Brainstorming – dialogue and discussion – practical training – cooperative learning

**Teaching aids:**  Electronic board – textbook

**Warm Up :**  How do you keep yourself safe Use reliable and secure sources While searching on the Internet?

### Lesson Presentation

📖 **Question ١: Write and Compare: Write a sentence for each of the following pairs of phrases to explain the link between them:**

← blocking and bullying

← Electronic sources and mention the sources of information and their owners

← Identity theft and spam

📖 **The second question: – Read and answer:**

← List three sources that researchers can use to search for information

←What is the effect of viruses on the computer and the information contained in the device?

←What should you do before you tag your friend in a photo or post on the Internet ?

←Why is it useful to put the sentence in quotation marks when searching for it on the Internet?

← Name one reason why blogs are unreliable sources

← Give an example of cyberbullying

←What is hacking or hacking?

←What is PowerPoint?

**Evaluation:**  Evaluate the students' answers

**Homework :**  Solve The book's Questions P.78 – 79